

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of:

Nobuo HAMAMOTO *et al.*

Serial No.: Unassigned (§53b Continuation of 08/446,278)

Filed: 22 June 2001

For: DIGITAL INFORMATION SYSTEM, DIGITAL AUDIO
SIGNAL PROCESSOR AND SIGNAL CONVERTER

PRELIMINARY AMENDMENT

Assistant Commissioner for Patents
Washington, D.C. 20231

22 June 2001

Sir:

Prior to calculating the filing fee for the above-identified application, the following amendments and remarks are respectfully submitted.

IN THE SPECIFICATION:

Page 1, between the title and line 1 ("BACKGROUND OF THE INVENTION"), please insert the following new section.

--CROSS-REFERENCE TO RELATED APPLICATIONS

This application is a continuation of Serial No. 08/446,278 filed 22 May 1995, now allowed, which is a continuation of Serial No. 07/727,420 filed 9 July 1991, abandoned.--

IN THE CLAIMS:

Please cancel claims 1-45 as originally filed, and substitute therefor replacement claims 46-54, as follows.

46.(New) A memory apparatus having a playback function removably connected with a digital signal source to store digital data received from said digital signal source and to reproduce the digital data stored therein independently of said digital signal source, comprising:

a built-in memory circuit formed of a semiconductor memory for storing digital data received with addresses of said digital data from said digital signal source; and

a built-in playback circuit, including a digital-to-analog converter, a filter circuit and an audio amplifier, for reproducing digital data stored in said memory circuit.

47.(New) A memory apparatus according to Claim 46, wherein said digital data is transmitted by communication means.

48.(New) A memory apparatus according to Claim 46, wherein said built-in playback circuit has playback conditions which are automatically designated in accordance with the contents of an identification (ID) code.

49.(New) A memory apparatus according to Claim 46, wherein said memory apparatus is a card-like storage medium.

50.(New) A memory apparatus according to Claim 46, wherein said playback circuit has playback conditions which include stereo or monaural playback, a resolution of 8 and 16 bits, and a sampling frequency.

51.(New) A memory apparatus having a playback function removably connected with a digital signal source to store digital data received from said digital signal source and to reproduce the digital data stored therein independently of said digital signal source, comprising:

a built-in memory circuit formed of a semiconductor memory for storing digital data received with addresses of said digital data from said digital signal source;

a built-in playback circuit, including a digital-to-analog converter, a filter circuit and an audio amplifier, for reproducing digital data stored in said memory circuit; and

a rechargeable battery capable of being charged by a power supply in said digital signal source when said memory card is connected with said digital signal source.

52.(New) A memory apparatus according to Claim 51, wherein said built-in playback circuit has playback conditions which are automatically designated in accordance with the contents of an identification (ID) code.

53.(New) A memory apparatus according to Claim 51, wherein said memory apparatus is a card-like storage medium.

54.(New) A memory apparatus according to Claim 51, wherein said playback circuit has playback conditions which include stereo or monaural playback, a resolution of 8 and 16 bits, and a sampling frequency.

IN THE ABSTRACT:

Please delete the ABSTRACT OF THE DISCLOSURE as originally filed, and substitute therefor the following replacement Abstract.

--ABSTRACT OF THE DISCLOSURE

A digital information system for sale of information in the form of digital signals, and an audio processor, a data compressor, a data extender and a signal processor suitably used with the system. When a digital signal is received, a digital signal source is connected directly to a player for receiving and storing a specified information, which is reproduced by the player independently. A voice interval of a digital audio signal is processed for slow and fast playback. The fast and slow playback are possible without deteriorating the sound quality, and ripples can be greatly reduced against the digital input signal, thereby making possible a faithful data compression of an acoustic signal or the like by a simple configuration. The self-diagnosis function permits the use of a defective memory chip, thereby leading to a very economical system.--

REMARKS

Applicants respectfully request consideration of the following information.

AMENDMENTS

The specification initially has been amended to incorporate information regarding related applications for which benefit of an earlier filing date is relied upon in the present continuation application. Applicants reserve the right to present

supplemental Preliminary Amendments to amend the specification as necessary to conform it to U.S. practice and to correct minor grammatical and idiomatic inconsistencies therein, as were submitted and entered in the parent application.

The Abstract has been amended to conform it to U.S. practice requirements for a length of 50-150 words.

Approval and entry of the amendments are courteously solicited.

PENDING CLAIMS

Original Claims 1-45 have been cancelled, and new Claims 46-54 are submitted herewith. No new matter is added, and all of the limitations in the new claims find full support and antecedent basis in the original application as filed. Therefore, upon entry of this Preliminary Amendment, Claims 46-54 will be pending for examination and consideration in the present continuation application.

DRAWING CHANGES

Filed concurrently herewith is a Letter to the Official Draftsperson with proposed figure corrections shown in highlight, which are identical to those required and entered in the parent application. No new matter is added.

Also, attached hereto are forty-six (46) sheets of formal drawings for Figures 1-69 with the highlighted proposed drawing corrections completed thereon. Therefore, approval and entry of the proposed drawing corrections are respectfully requested.

INFORMATION DISCLOSURE STATEMENT

Filed concurrently herewith is an Information Disclosure Statement and Form PTO-1449 to identify all of the art cited to or by the Office in the parent applications, for entry in the present application so they appear on the printed face of any patent issuing hereon.

PRIORITY

Applicants claim priority under 35 U.S.C. §119 of JP 02-181402 filed 11 July 1990, JP 02-208072 filed 8 August 1990, JP 03-057972 filed 27 February 1991, and JP 03-057930 filed 28 February 1991. Certified copies of the priority documents and certified copies of English-language translations therefor were filed and acknowledged in prior application Serial No. 07/ 727,420. Confirmation of perfection of Applicants' claim for priority in the present application is courteously solicited.

ASSIGNEE OF FULL TITLE

Hitachi, LTD. is Assignee of full right, title and interest in and to the present case by virtue of the Assignment filed in prior application Serial No. 07/727,420 and recorded 9 July 1991 at Reel 5168, Frames 997-999.

APPENDIX A-MARKED VERSION

Attached to this Preliminary Amendment is Appendix A-Marked Version showing the amendments made herein by bracketing and underlining of deletions and additions, respectively.

CONCLUSION

This Preliminary Amendment is being filed concurrently with the present continuation application, and therefore, no additional fee is required.

Please charge any deficiencies in the fees filed herewith to ATS&K Deposit Account No. 01-2135 (as Order No. 500.31310CX2), and credit any overpayment thereto.

Respectfully submitted,



Paul J. Skwierawski
Registration No. 32,173
ANTONELLI, TERRY, STOUT & KRAUS
1300 North Seventeenth Street, Suite 1800
Arlington, VA 22209
Telephone 703-312-6600
Facsimile 703-312-6666

ATTACHMENTS:

- Appendix A-Marked Version
- IDS/Form PTO-1449
- Letter to Official Draftsperson and
Drawing Corrections
- Eighteen (18) sheets of formal drawings (Figs. 1-69)

APPENDIX A-MARKED VERSION**ABSTRACT OF THE DISCLOSURE**

[In a] A digital information system for [realizing the] sale of information [or the like having a commercial value] in the form of [a] digital [signal] signals, and an audio processor, a data compressor, a data extender and a signal processor suitably used with the system[, when]. When a digital signal is received[/delivered], a digital signal source is connected directly to a player for receiving and storing a specified information, which is reproduced by the player independently. A voice interval of a digital audio signal is processed [to realize the] for slow and fast playback. [The system includes a data compressor and a data extender of a simple configuration. The value of the digital signal received/delivered can be exhibited directly. A selling system is constructed easily, and the player is simple in configuration and easy to operate by anyone.] The fast and slow playback are possible without deteriorating the sound quality, and ripples can be greatly reduced against the digital input signal, thereby making possible a faithful data compression of an acoustic signal or the like by a simple configuration. The self-diagnosis function permits the use of a defective memory chip, thereby leading to a very economical system.

FIG. 1

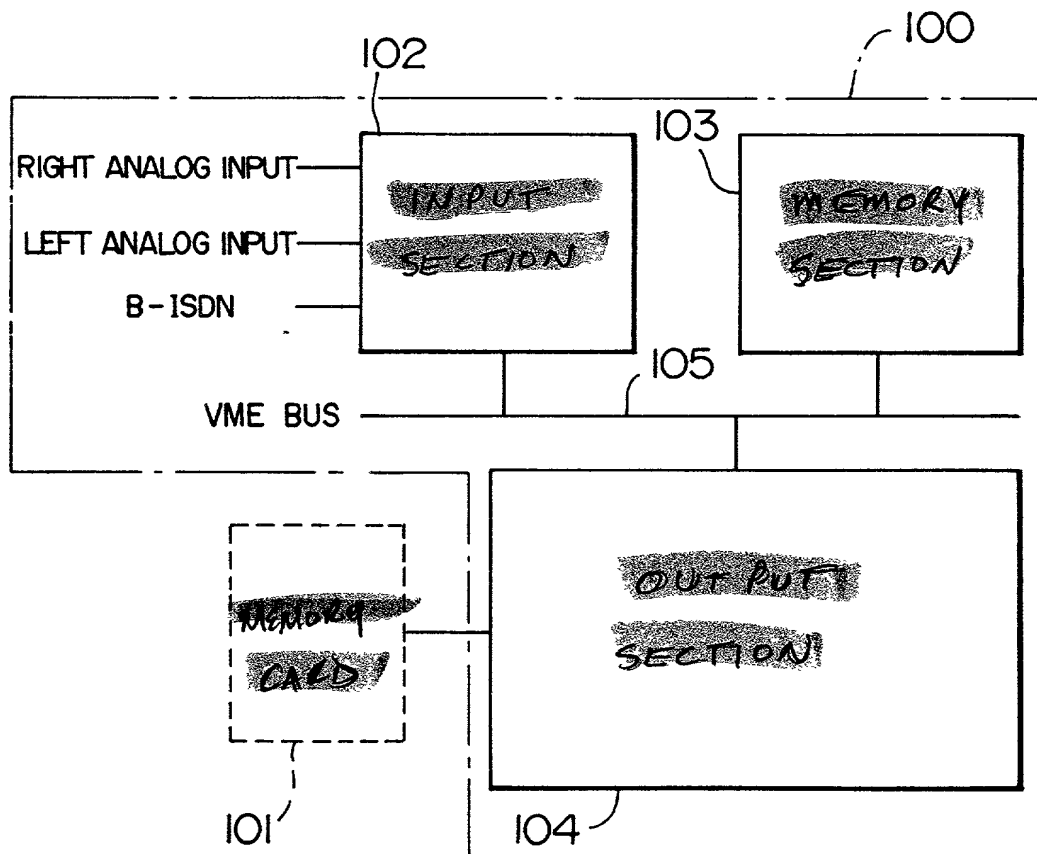


FIG. 2

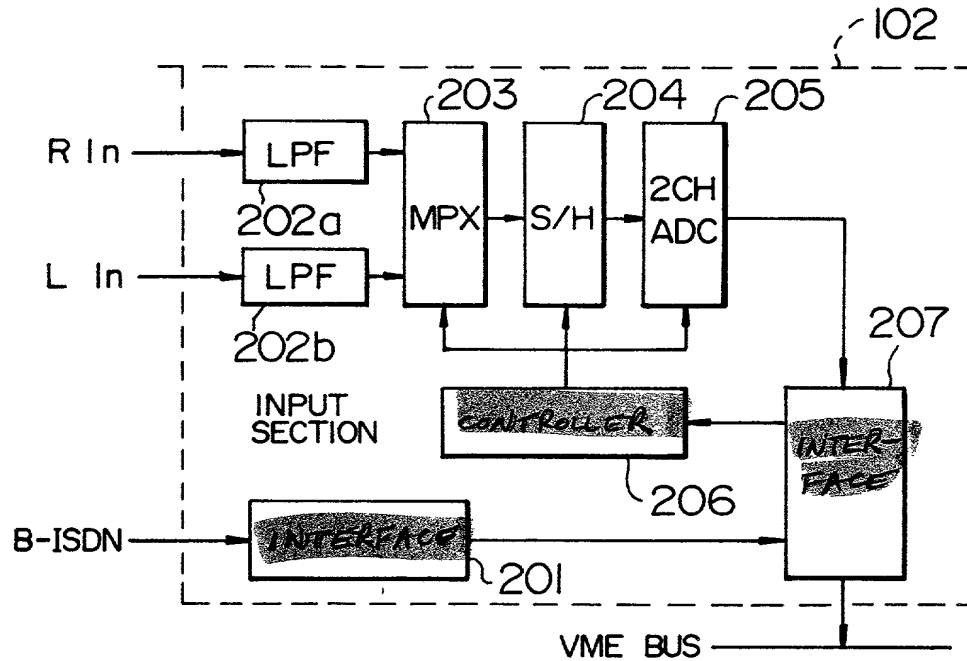


FIG. 3

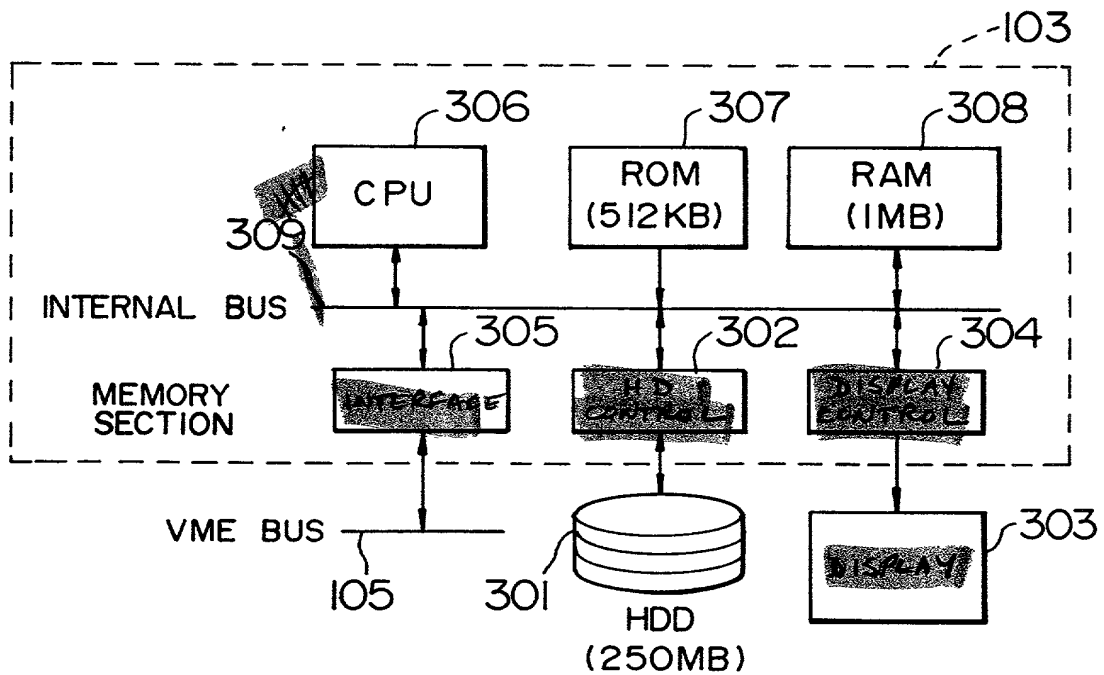


FIG. 4

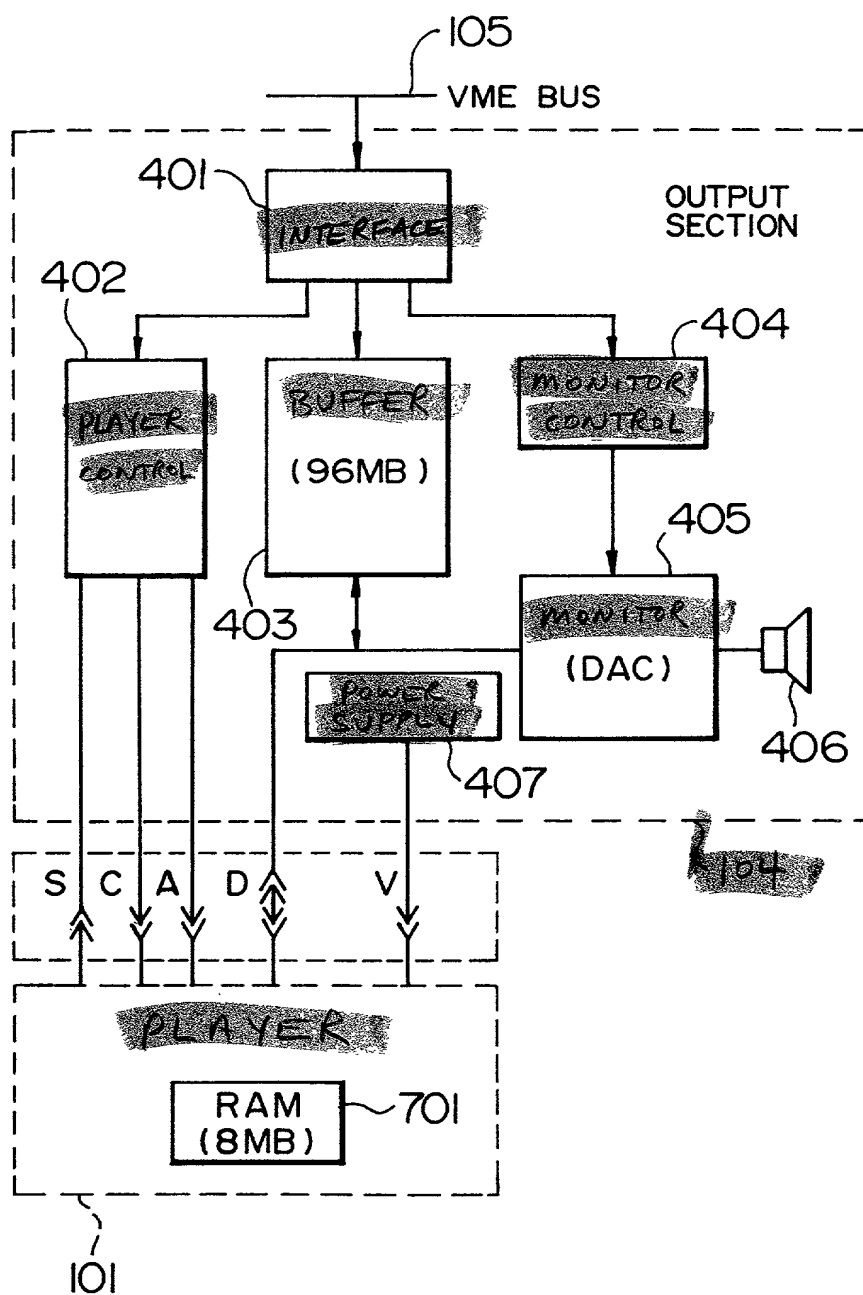


FIG. 5

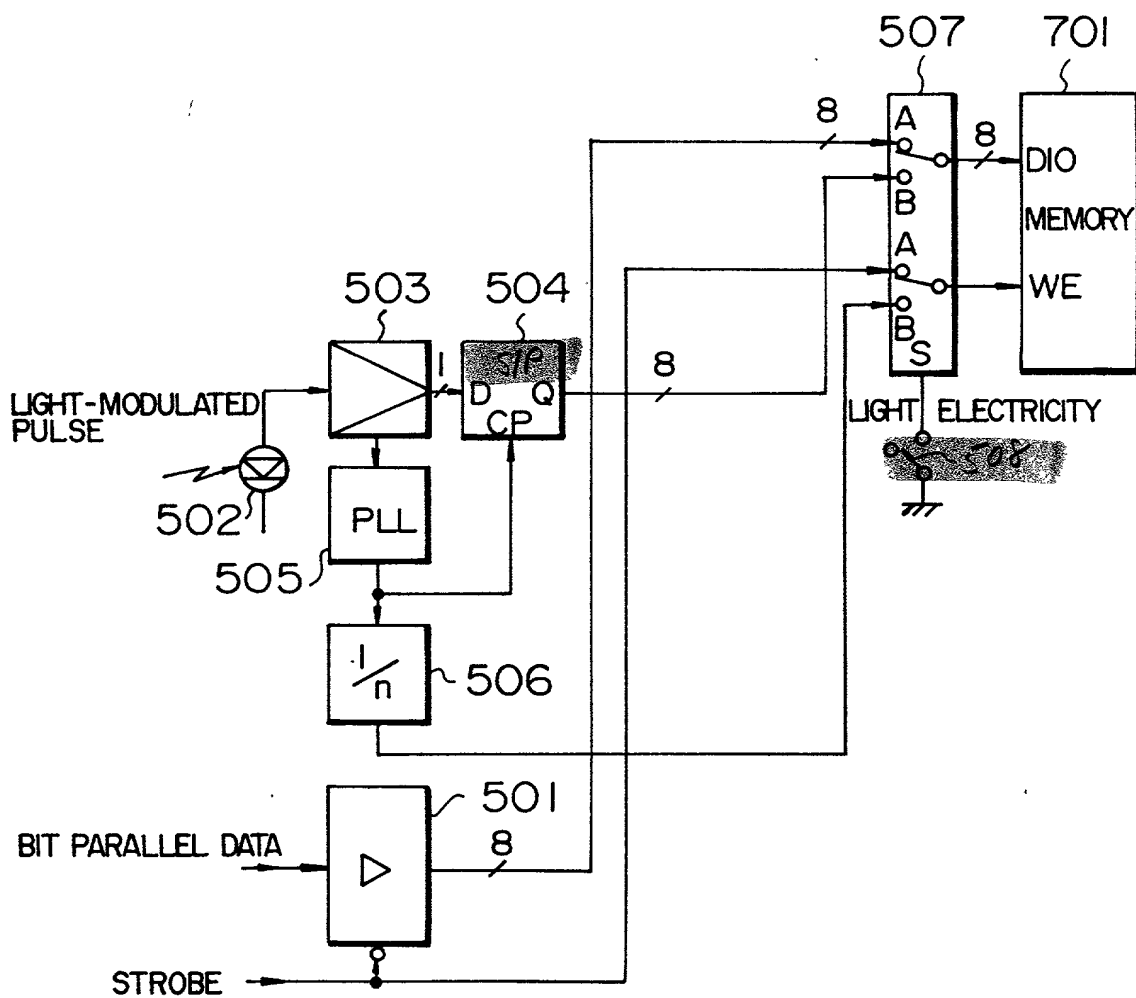


FIG. 6

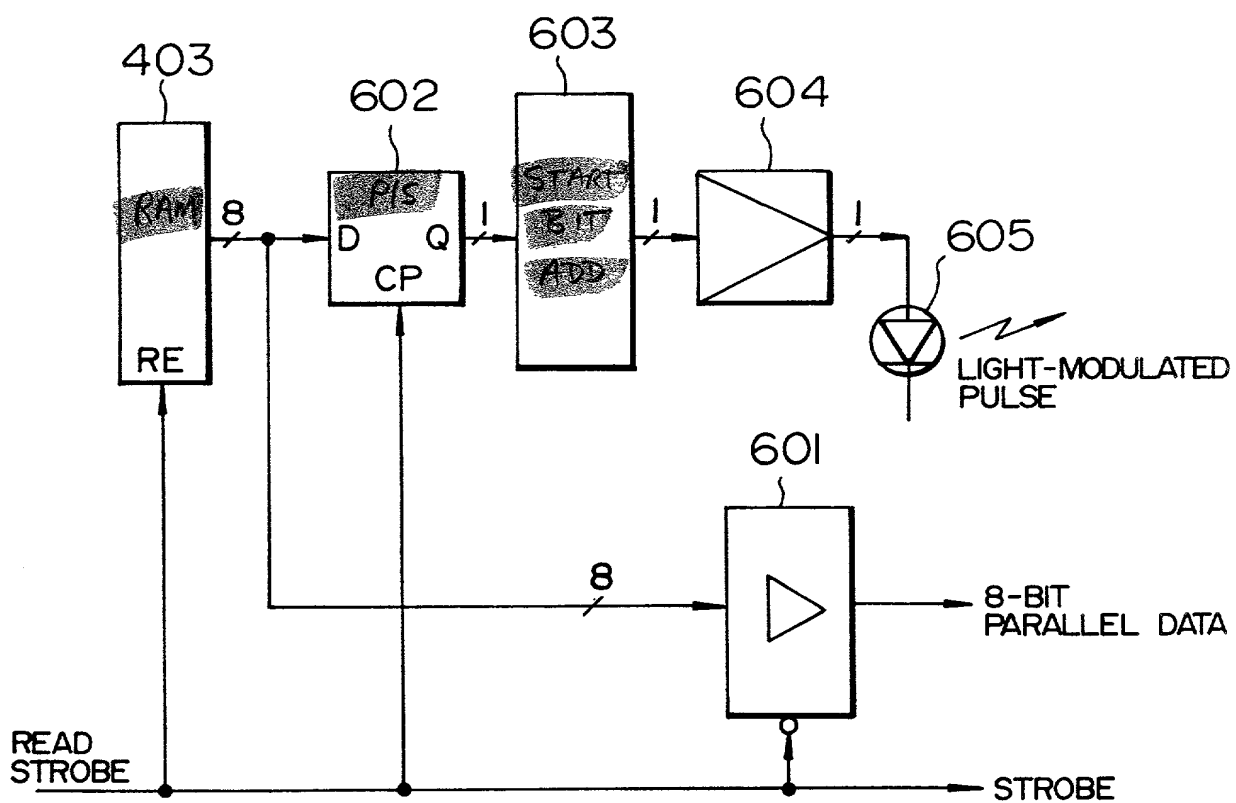
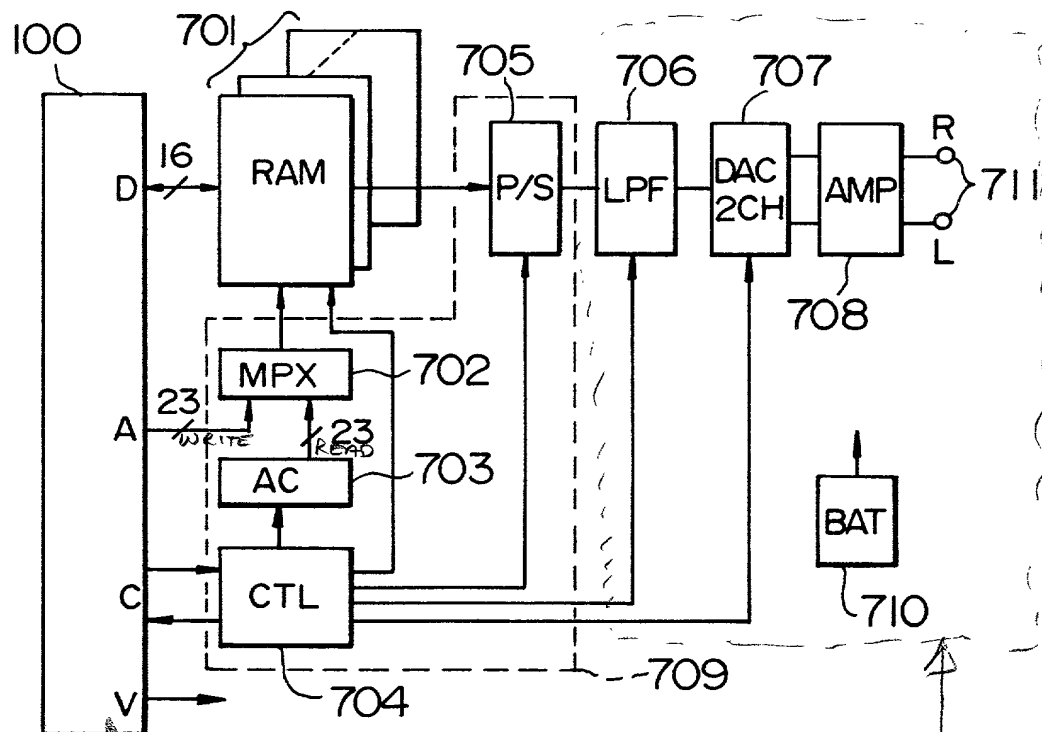


FIG. 7



PLAYBACK CCT
P. 26 123

0988368-062201

FIG. 30

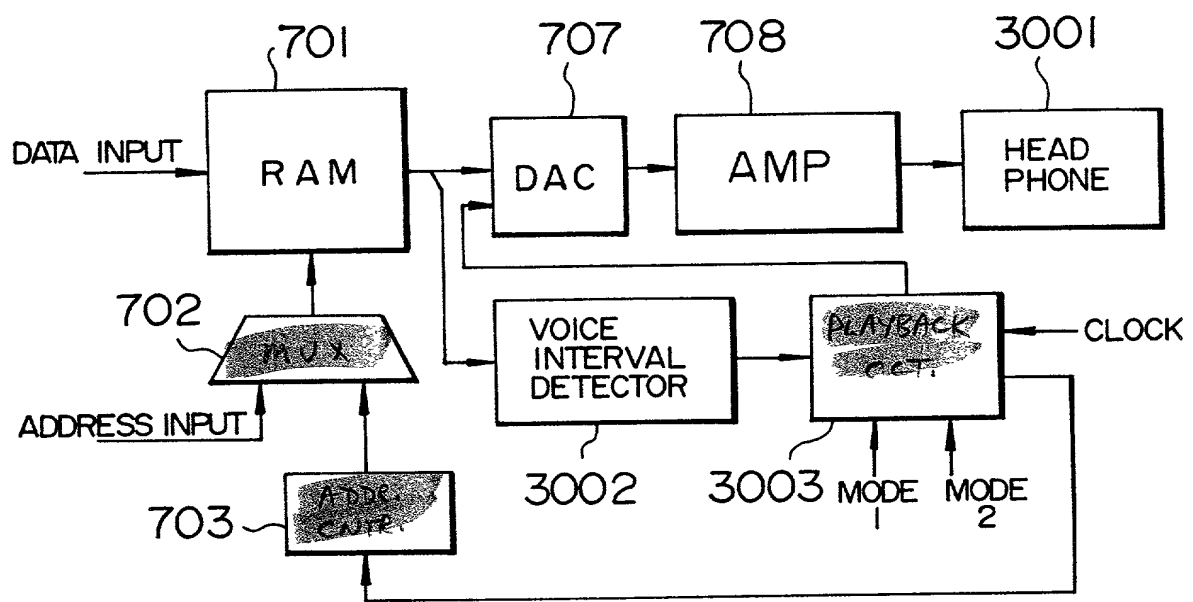


FIG. 31

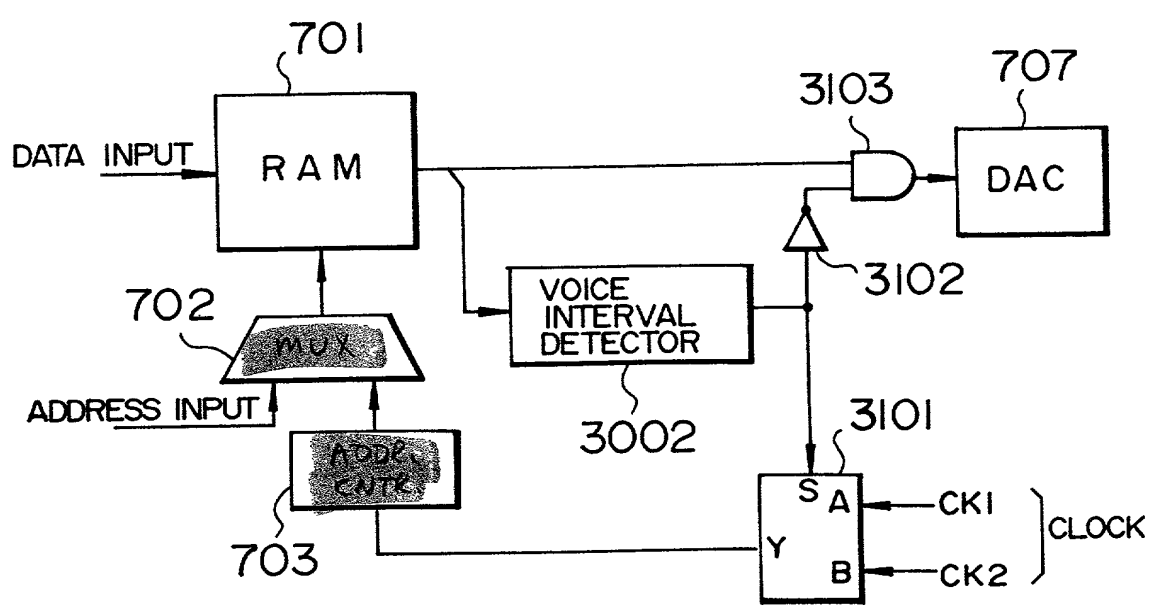
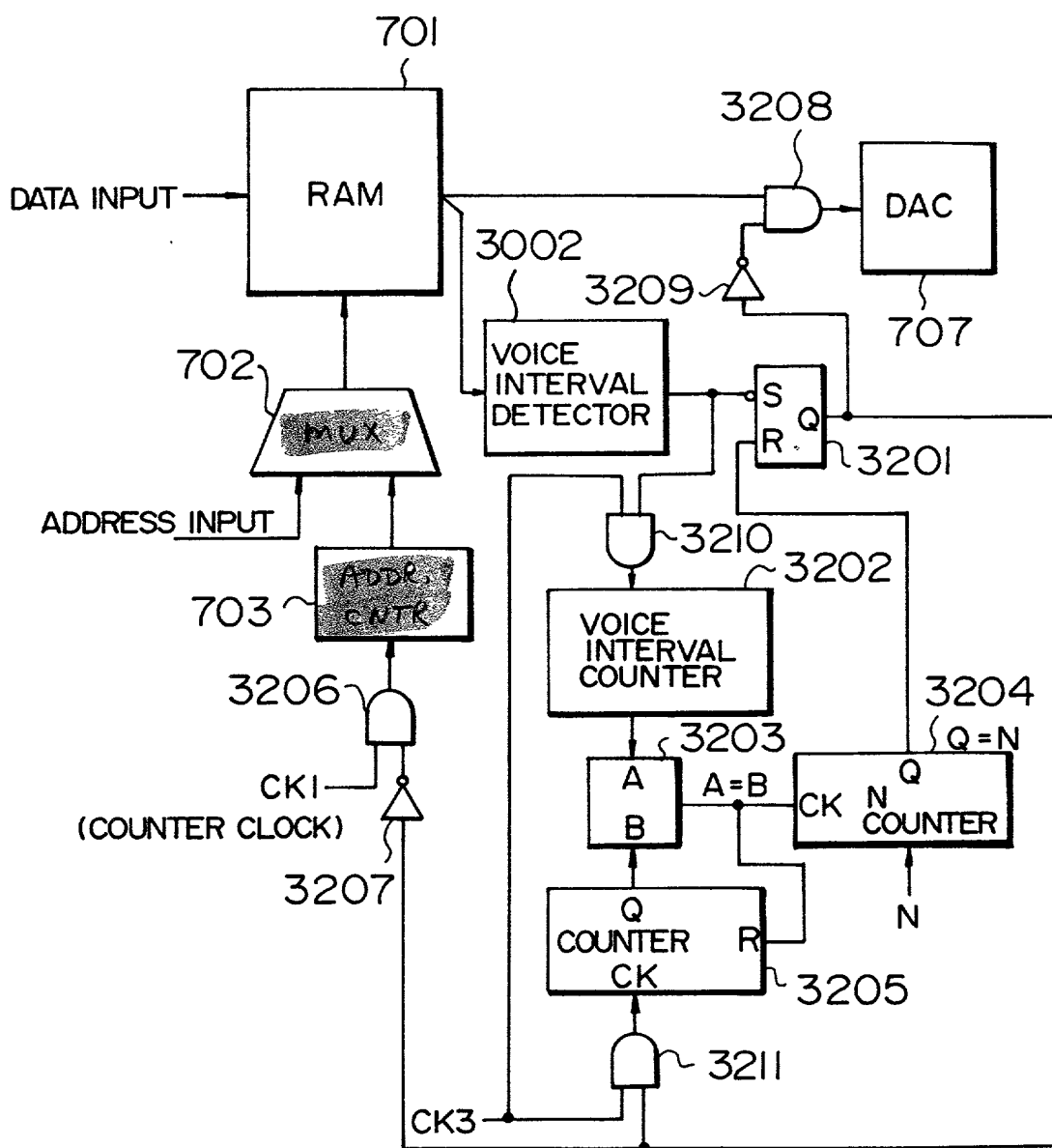


FIG. 32



09886360-09200
"09299" 89298860

FIG. 35

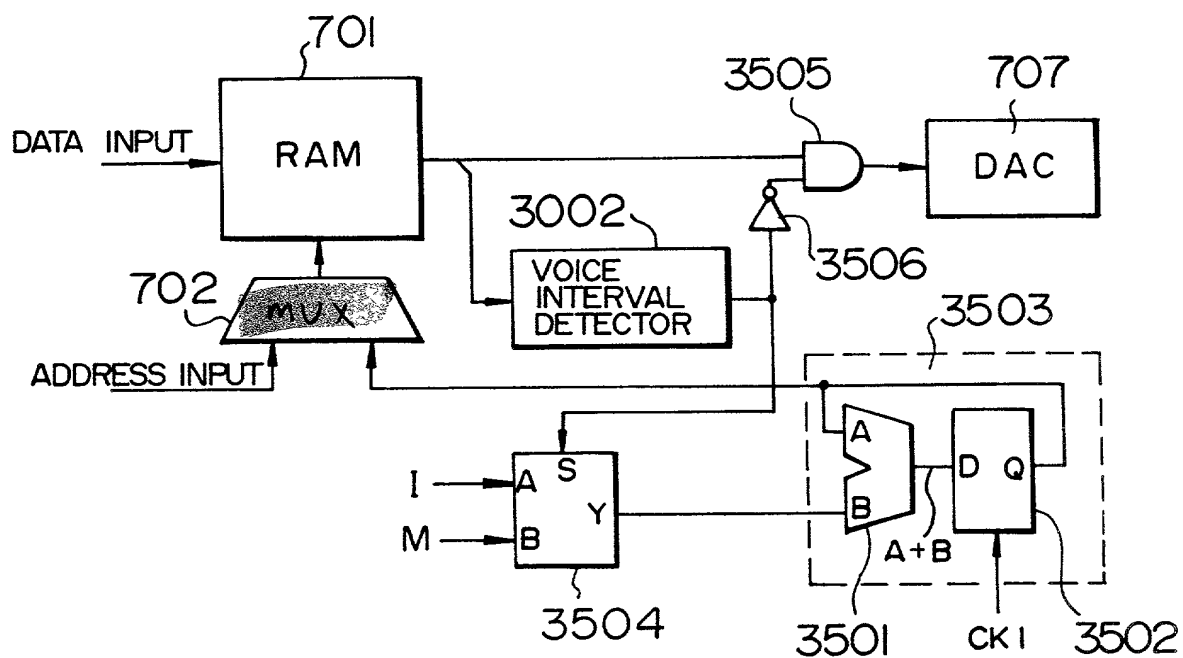


FIG. 36

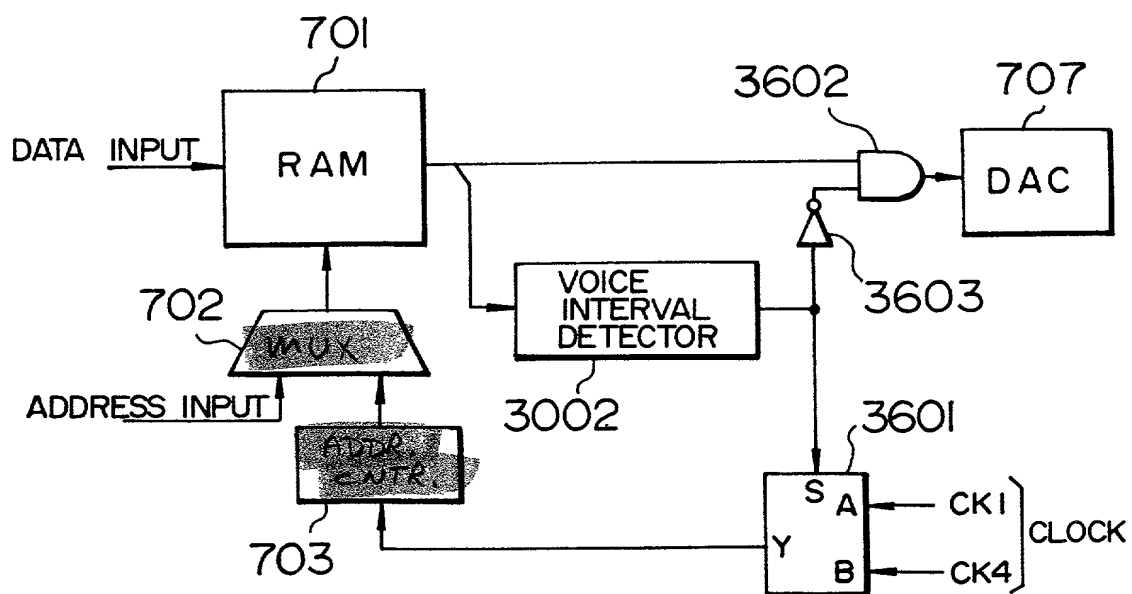


FIG. 37

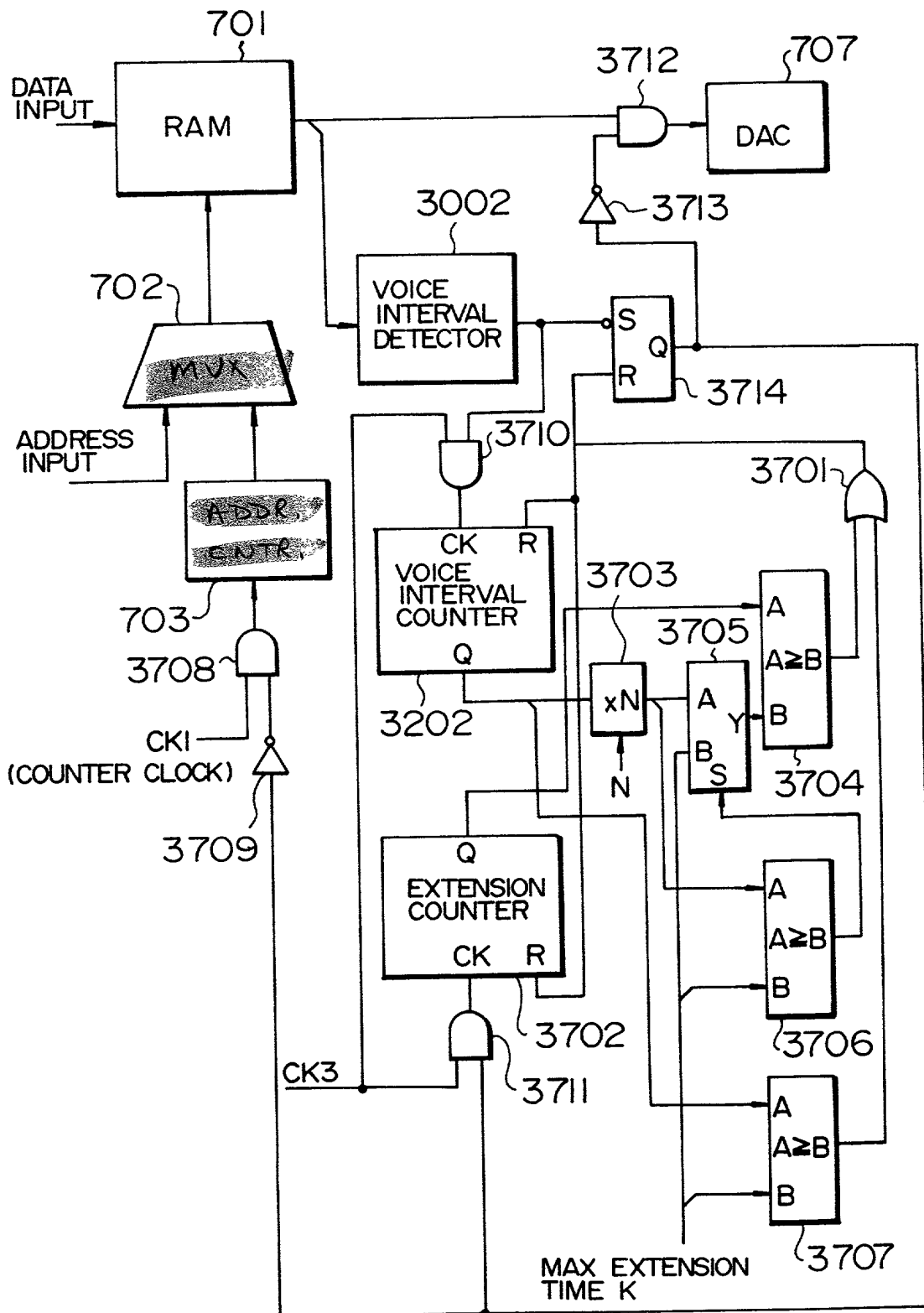


FIG. 43

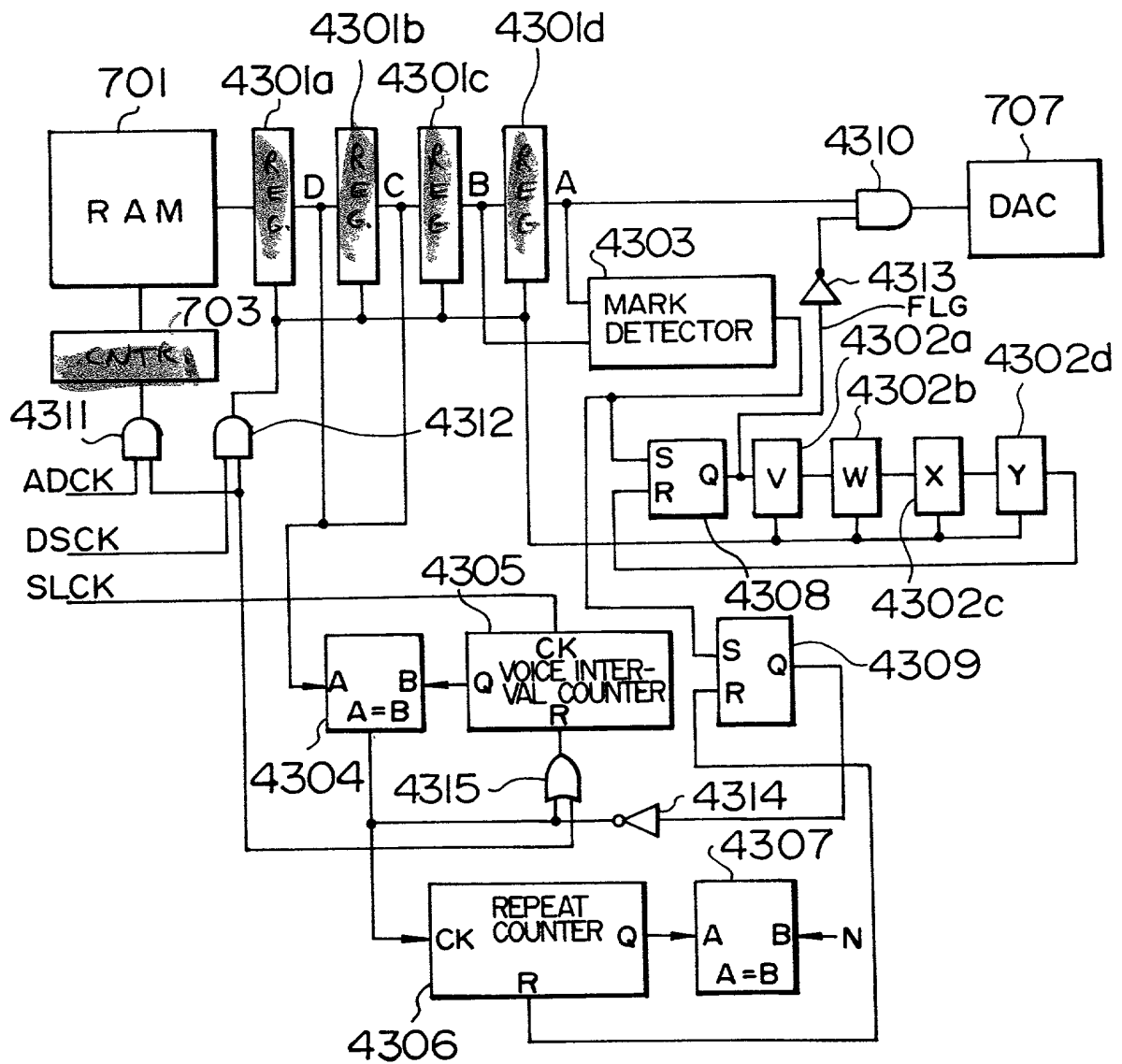


FIG. 44

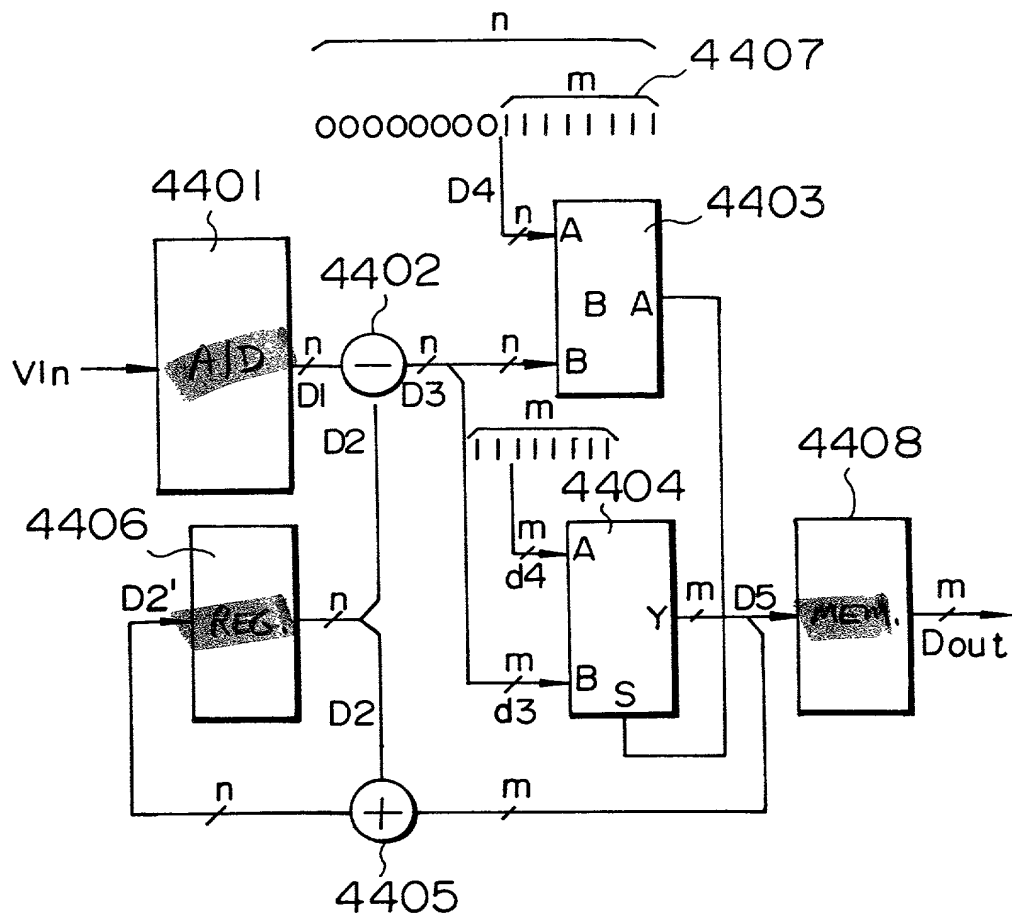


FIG. 45

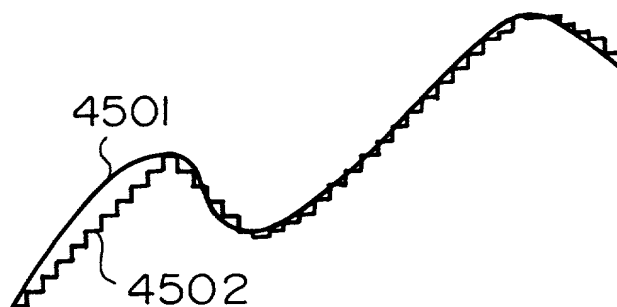
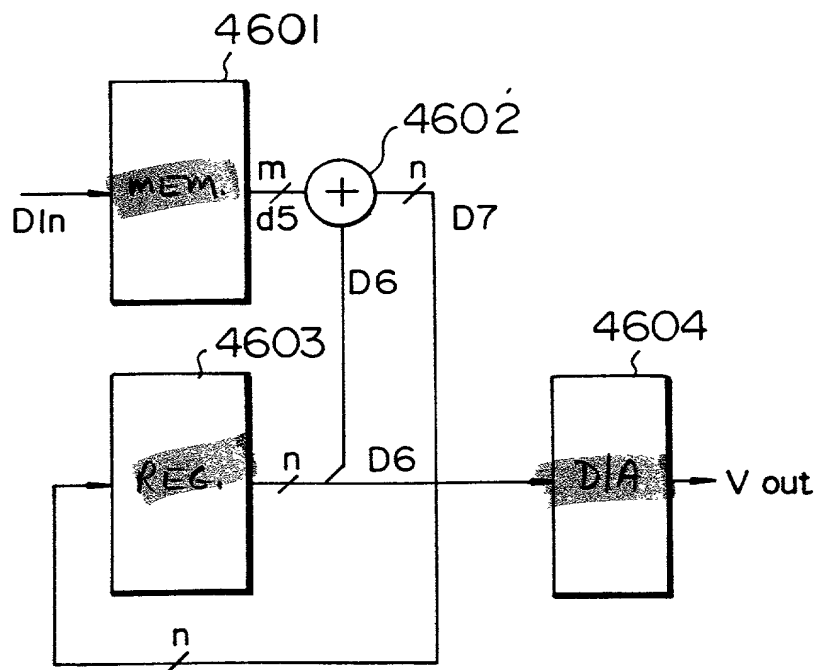


FIG. 46



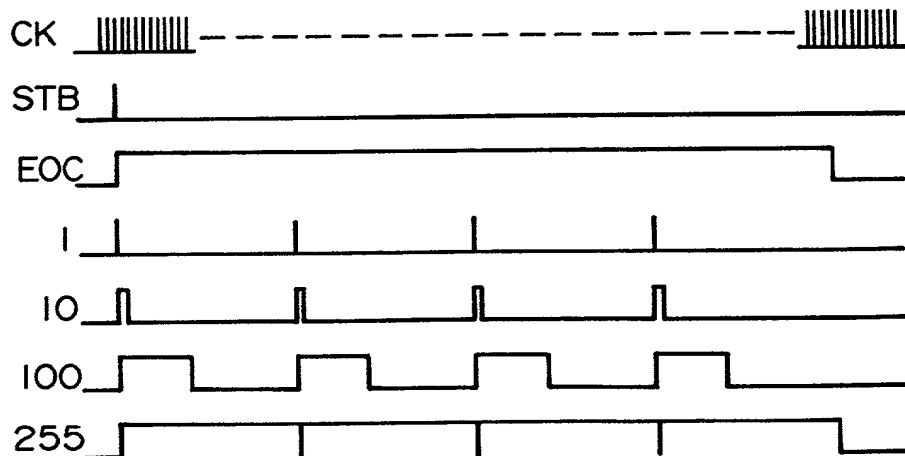
[illegible]

FIG. 50

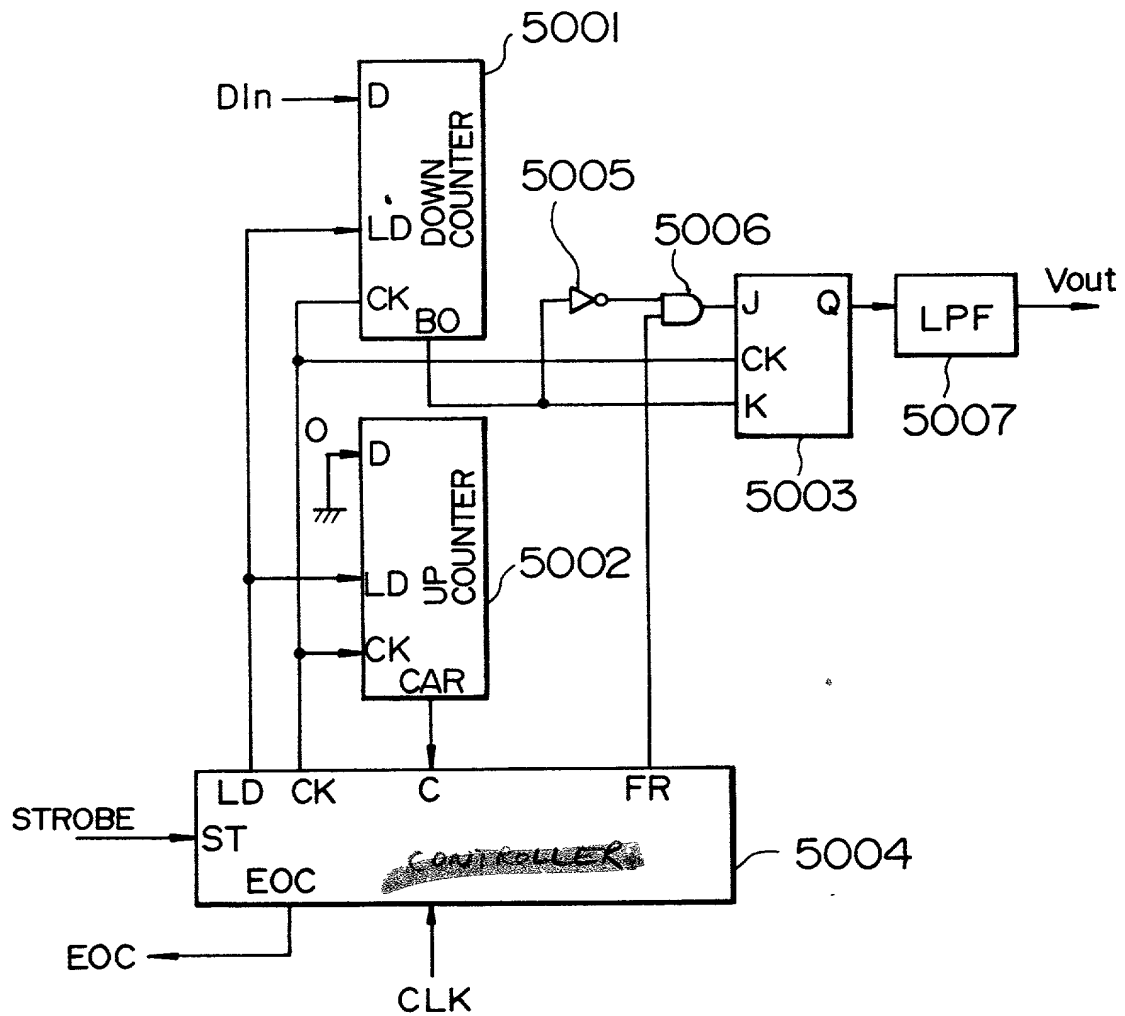


FIG. 56

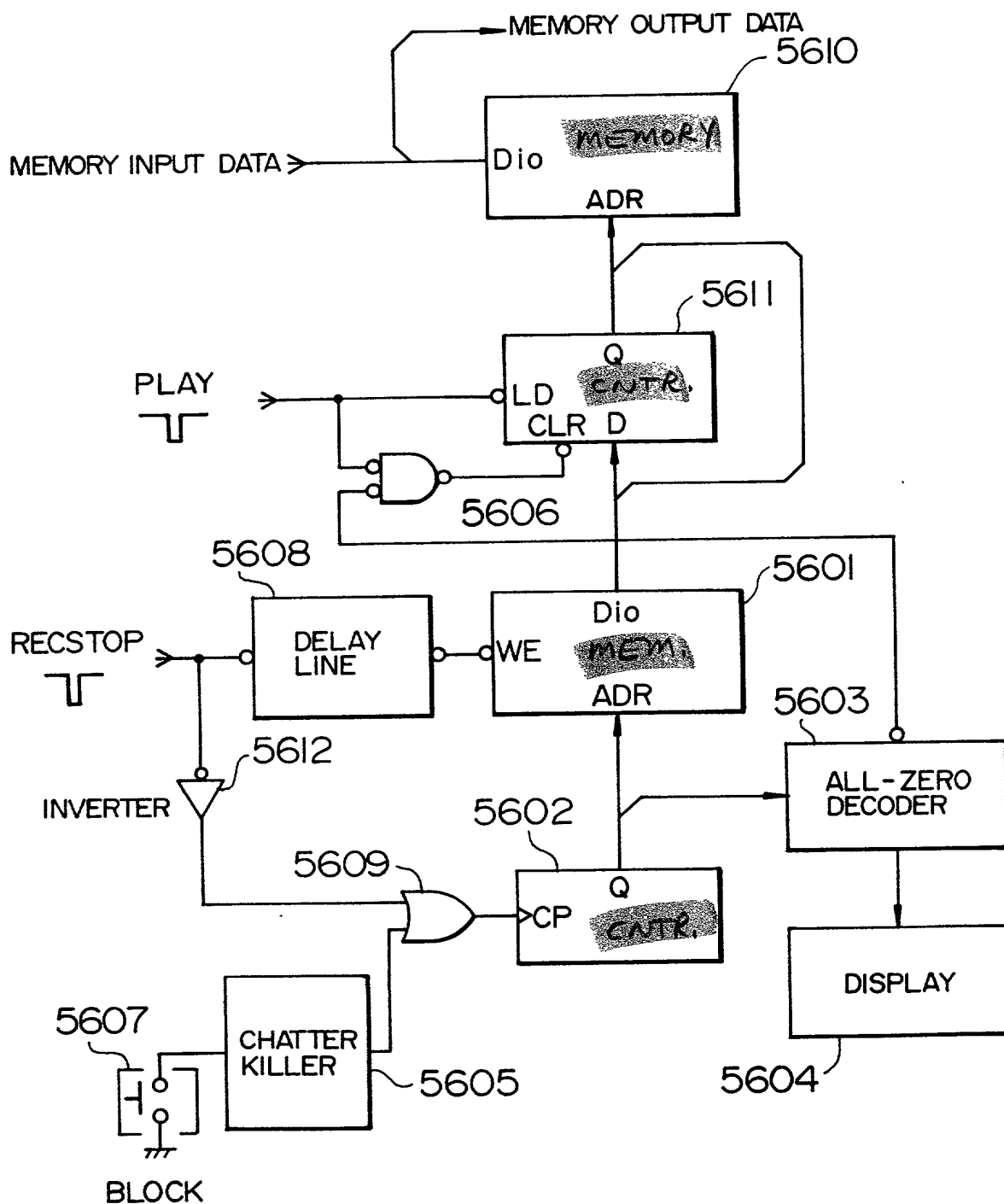


FIG. 59

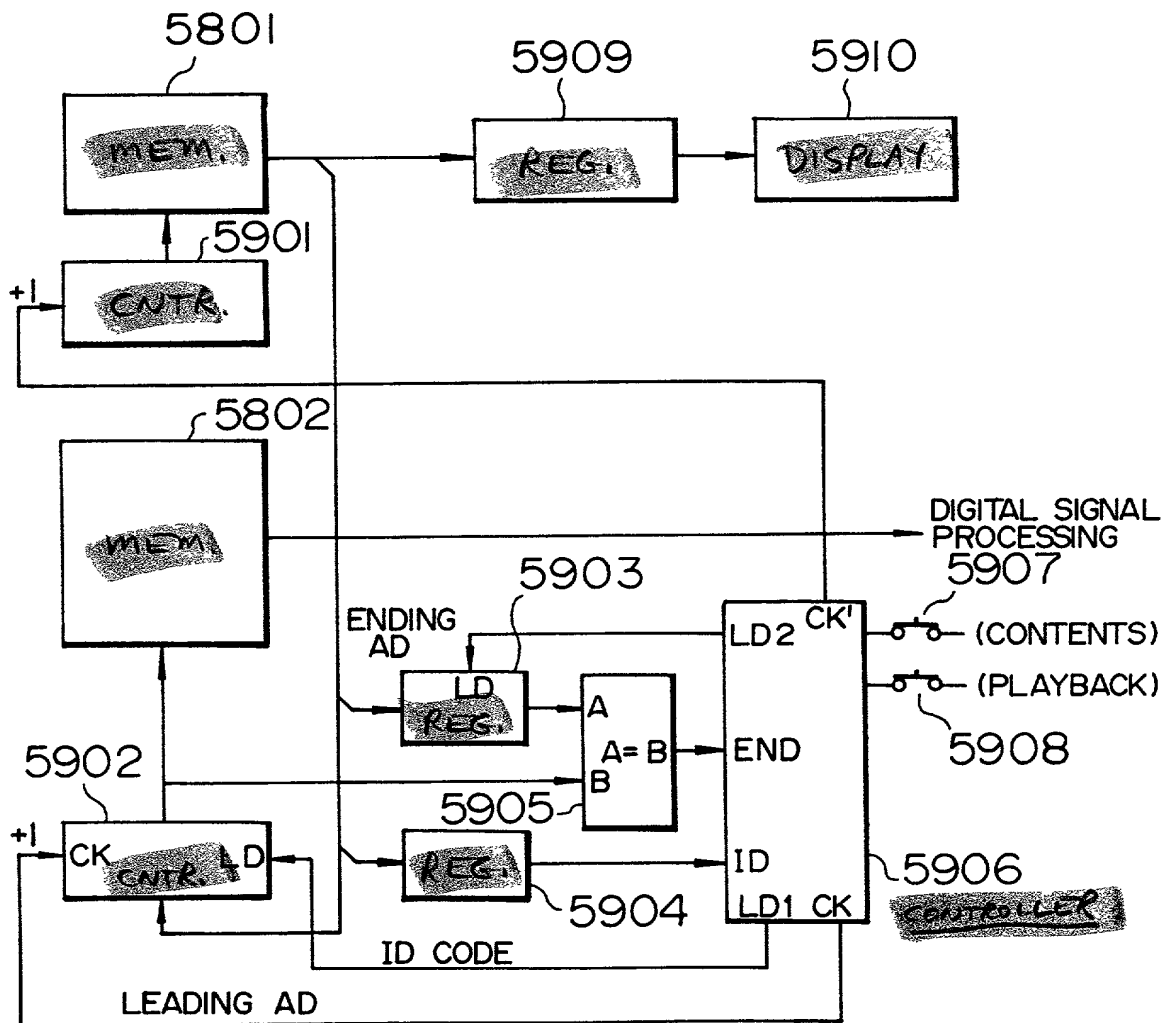


FIG. 61

